

Work Order ID 81016

81016

Page 1

March-06-12 3:35:55 PM

Item ID: D3948-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Plate, Anchor
 Start Date: 06/03/2012 Start Qty: 10.00 ***10*** Cust Item ID:
 Required Date: 20/03/2012 Req'd Qty: 10.00 ***10*** Customer:
 Reference:

Approvals: Process Plan: MLJ Date: 12/03/06 Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
 Run Start ***NR1***
 Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3948	B

100 0.00

100 B12-3-9
 Waterjet Memo 0.00

FLOW CNC Waterjet
 1-Cut as per Dwg D3948-1
 Dwg Rev: B
 Prog Rev: B
 2-Deburr if necessary

110 QC2- Inspect parts off machine FAI/FAIB 0.00

110 B12-3-9
 QC Memo 0.00

Quality Control

(14)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 81016***81016***

Page 2

March-06-12 3:35:55 PM

Item ID: D3948-041

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Plate, Anchor

Start Date: 06/03/2012 Start Qty: 10.00

10

Cust Item ID:

Required Date: 20/03/2012 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC8- Inspect parts - second check

0.00

120

QC

Memo

0.00

Quality Control

130

0.00

130

Small Fab

Memo

0.00

Small Fab

1- countersink holes as per dwg

2- deburr if necessary

140

QC5- Inspect part completeness to step on W/O

0.00

140

QC

Memo

0.00

Quality Control

5/2/12

(14)

5/12/03/12 13
P10 →

5/2/12

(13)

W/O:		81016 WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3946-01 PAR #: _____ Fault Category: Small P/B NCR: Yes No DQA: 12/03/23 Date: 12/03/23
 Resolution: Scrap Disposition: Scrap QA: N/C Closed Date: 12/3/23

NCR:		11.31 WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
12/03/12	#130	operator counter 'sunk' too deep. P.C. 102 / operator error	S 12/03/12 057042	Scrap + DASH Qty 41 no Replac extra 4's made	EB 12/03/12	S 12/03/12	S 057042 12/03/12	S 12/03/12

NOTE: Date & initial all entries

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 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Chemical Conversion Coat per QSI005 4.1	0.00							
150									
HandFinish	Memo	0.00							
Hand Finishing									
160	QC3- Inspect Part Finish	0.00							
160									
QC	Memo	0.00							
Quality Control									
170	Pick Kit	0.00							
170									
Packaging	Memo	0.00							
Packaging									

③ 26-12-3-19

13x p m/l 12/03/14

12/3/14 sf ③

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180		0.00							
180									
Small Fab	Memo	0.00							
Small Fab	INSTALL NUT PLATES AS PER DWG								
190	QC5- Inspect part completeness to step on W/O	0.00							
190									
QC	Memo	0.00							
Quality Control									
200	Identify as per dwg & Stock Location: <u>ST 74</u>	0.00							
200									
Packaging	Memo	0.00							
Packaging									

EP 12/23/20 (13)

*13 0 (13)
12/03/21*

(13x) 8-12-03-21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

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 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210	QC21- Final Inspection - Work Order Release	0.00							
210									
QC	Memo	0.00							
Quality Control									

MLJ 12/03/21

MLJ 12/03/21
 13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March-06-12 3:35:59 PM

Page 1

Work Order ID: 81016

81016

Parent Item: D3948-041

D3948-041

Parent Item Name: Plate, Anchor

Start Date: 06/03/2012

Required Date: 20/03/2012

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP RevA: New issue DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.063		Purchased	No			100	sf	420.4996	0.1085	1.142105	2,		

M6061T6S 063

6061-T6 .063 Sheet

**

B12-3-9

Location

Loc Qty

Loc Code

MAT021

420.4995684

113608

0

116308

7.01556842

117285

70.544

119331

48

119802

22.94

120218

32

120866

240

(14)

19862

MS21059L3

Purchased

No

170

Each

312.0000

2

20

MS21059L 3

Nut Plate

**

2

Location

Loc Qty

Loc Code

ST301

28

118614

8

119546

20

ST302

284

120308

184

120833

100

26

MS20426AD3-3

Purchased

No

170

Each

2,587.000

4

40

MS20426AD3-3

Rivet

**

5

Location

Loc Qty

Loc Code

ST316

2587

119109

2152

19099

435

52

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

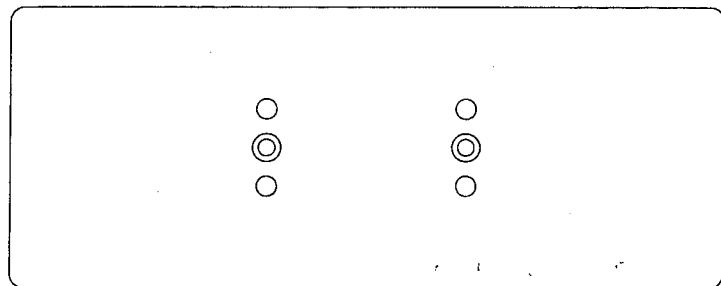
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

PARTS LIST

ITEM	QTY -041	P/N	DESCRIPTION
1	X	D3948-041	PLATE, ANCHOR
2	1	D3948-1	PLATE
3	2	MS21059L3	NUTPLATE (OR MS21059-3)
4	4	MS20426AD3-3	RIVET

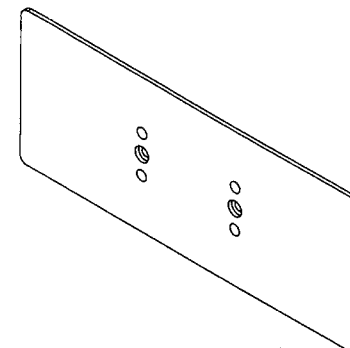


D3948-1

D3948-041 PLATE, ANCHOR

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: NONE
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3948-041" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.10 lbs



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 81016 MLCJ

12/03/06

RELEASED
07/05/16

B	-3F NOW MADE FROM 304 SS (ZN A8-5), 0.063 THICK WAS 0.040 (ZN A8-3, A8-5), -043/-3/-3F WIDER (ZN B6-4, B6-5)	CP	09.06.08
A	NEW ISSUE	CP	09.05.13
REV.	DESCRIPTION	BY	DATE
DESIGN	921	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	921		
CHECKED	2/1	DRAWING NO.	REV. B
MFG. APPR.	2/1	D3948	SHEET 1 OF 5
APPROVED	2/1	TITLE	SCALE
DE APPR.	2/1	PLATE, ANCHOR	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

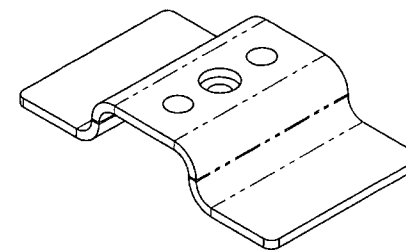
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

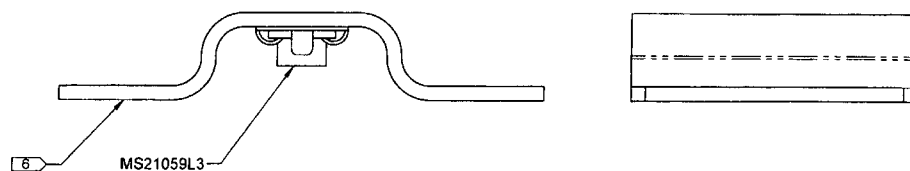
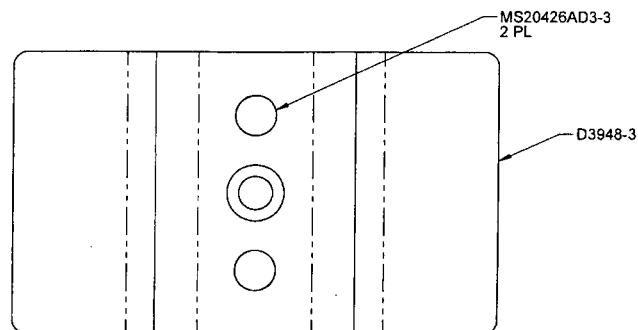
NOTE: Date & initial all entries

PARTS LIST

ITEM	QTY	P/N	DESCRIPTION
1	X	D3948-043	PLATE, ANCHOR
2	1	D3948-3	PLATE
3	1	MS21059L3	NUTPLATE (OR MS21059-3)
4	2	MS20426AD3-3	RIVET



8/10/14

**D3948-043 PLATE, ANCHOR**RELEASED
09/06/08

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: NONE
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3948-043" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.06 lbs

DESIGN	92	DART AEROSPACE LTD	
DRAWN	92	HAWKESBURY, ONTARIO, CANADA	
CHECKED	92	DRAWING NO.	REV. B
MFG. APPR.	92	D3948	SHEET 2 OF 5
APPROVED	92	TITLE	SCALE
DE APPR.	92	PLATE, ANCHOR	NTS
DATE	09.06.08	COPYRIGHT © 2008 BY DART AEROSPACE LTD	
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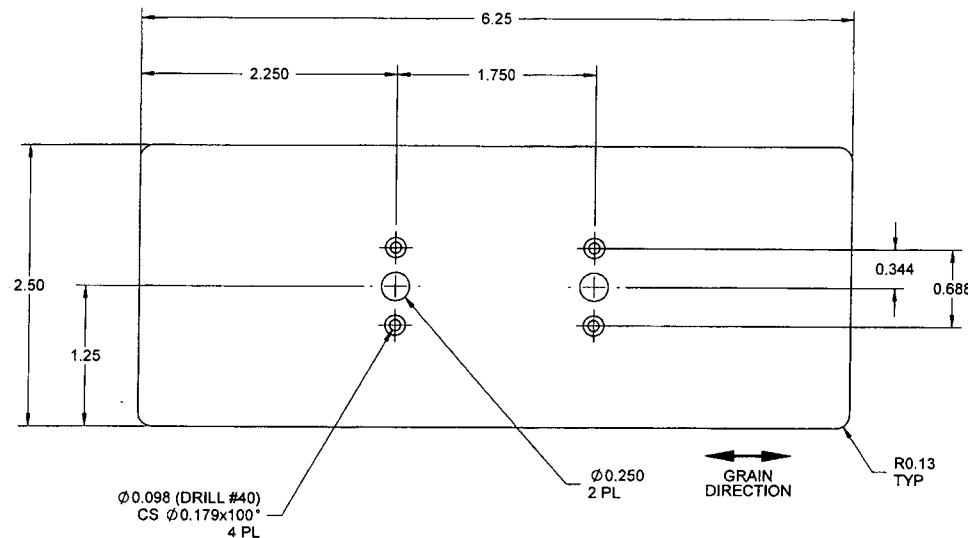
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3948-1 PLATE

RELEASED
09/06/08

- NOTES:**
- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET 0.063" THICK PER AMS-QQ-A-250/11 OR AMS 4025/4027 (REF DART SPEC. M6061T6S.063)
 - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 0.10 lbs

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN				
CHECKED			DRAWING NO.	REV. B
MFG. APPR.			D3948	SHEET 3 OF 5
APPROVED			TITLE	SCALE
DE APPR.			PLATE, ANCHOR	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

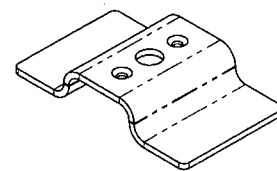
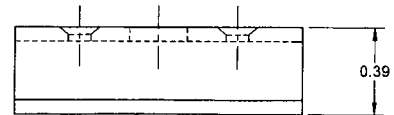
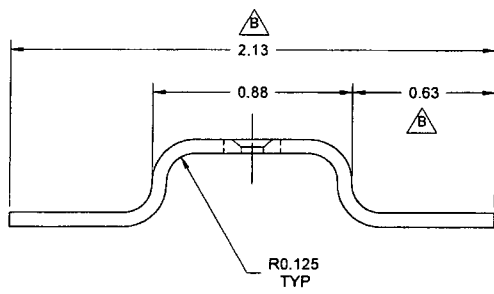
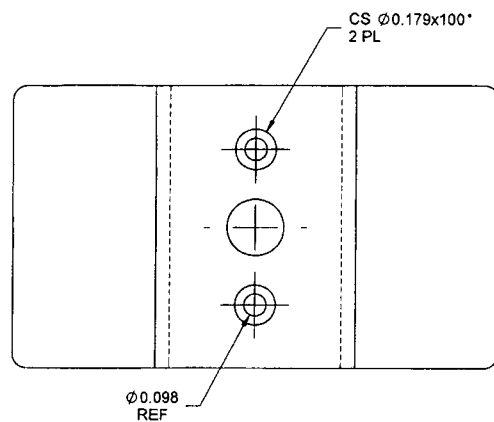
8 7 6 5 4 3 2 1

D

C

B

A



81016

D3948-3 PLATE

RELEASED
8/6/16

NOTES:

- 1) MATERIAL: MAKE FROM D3948-3F
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: NONE
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.06 lbs

DESIGN	91	DART AEROSPACE LTD	
DRAWN	91	HAWKESBURY, ONTARIO, CANADA	
CHECKED	91	DRAWING NO. D3948	REV. B
MFG. APPR.	91	SHEET 4 OF 5	
APPROVED	91	TITLE	SCALE
DE APPR.	91	PLATE, ANCHOR	
DATE	09.06.08	NTS	

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8 7 6 5 4 3 2 1

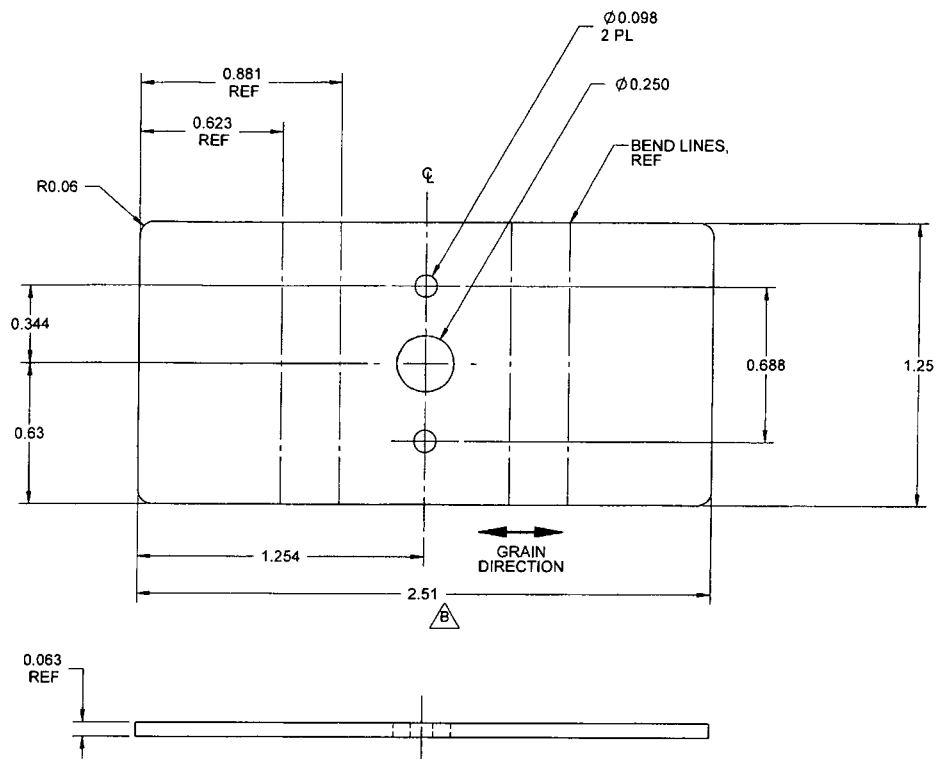
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3948-3F PLATE

81014

RELEASED
07/06/16

- NOTES:**
- 1) MATERIAL: AISI 304 SS SHEET 0.063" THICK (REF DART SPEC. M304S.063)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 0.06 lbs

DESIGN	91	DART AEROSPACE LTD	
DRAWN	91	HAWKESBURY, ONTARIO, CANADA	
CHECKED	91	DRAWING NO.	REV. B
MFG. APPR.	91	D3948	SHEET 5 OF 5
APPROVED	91	TITLE	SCALE
DE APPR.	91	PLATE, ANCHOR	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries